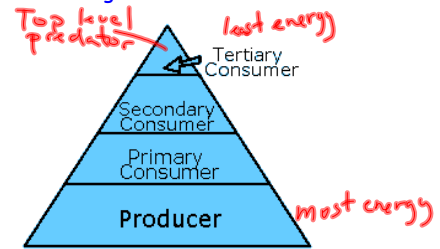


### 1.11 Energy Movement in Ecosystems

- All energy on Earth originates from the Sun
- Plants make their own food through **photosynthesis** and are called **producers** or **autotrophs** (self-feeders)
- Organisms that eat plants are called **primary consumers**, they rely on autotrophs for energy.
- Organisms that feed off of primary consumers are called **secondary consumers**.
- All consumers are considered to be **heterotrophs** since they must get their energy indirectly by eating autotrophs or other heterotrophs

Oct 25-12:46 PM

- Producers (1st level), primary consumers (2nd level) and secondary consumers (3rd level) are **trohic levels** of an ecosystem. In general, the higher the level, the less energy available to organisms and less organisms can exist.

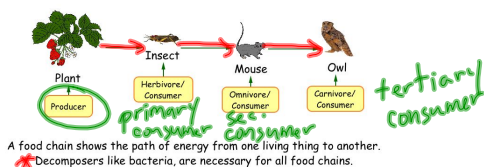


Oct 25-12:56 PM

### Food chains and webs

- Food chains show how energy moves from one organism to another.

The Food Chain Of An Owl



Oct 25-1:07 PM

- Food webs show all the feeding relationships in an ecosystem.

Draw a food web with the following organisms:

spruce trees, grasses, voles, mice, red fox, coyotes, elk, bison and wolves.

— prin. consumers  
 — sec. consumers  
 prod.

Oct 25-1:36 PM



Oct 25-2:51 PM